The RSDO News

April 2003

A Message From the Chief of the RSDO

Since our September 2002 newsletter, we have bid farewell to three staff members and hello to two new members of the RSDO team. Mark Baugh, Mission Integration Manager, returned to the Applied Engineering & Technology Directorate (Code 500) where he was assigned to the Instrument Systems Branch. Jerry Edmond, Lead Contracting Officer, was reassigned to the Gamma-ray Large Area Space Telescope (GLAST) Project as the Lead Contracting Officer. He also serves as the contracting Officer for other missions under the Structure and Evolution of the Universe Program Office. Lori Levine, Contracting Specialist, was reassigned to the NPOESS Preparatory Project (NPP). After recently receiving a contracting officer's warrant, Lori is now the Lead Contracting Officer for NPP.

Our new arrivals are William (Bill) Reaves, Mission Integration Manager, and Rebecca Wilkinson, Lead Contracting Officer. Brief biographical profiles of Bill and Rebecca are located in this newsletter. Please join me in welcoming them to the RSDO staff.

From an operations point of view, we have been very busy supporting a number of NASA's Small Explorer (SMEX) missions, the Sun-Earth Connection Program's Geospace Electrodynamics Connection (GEC) mission, and numerous in-house studies for NASA and other agencies. We are also in the midst of On-Ramp VII, where existing RSDO vendors can add new buses to the RSDO catalog and offerings from new vendors may be accepted. Look for articles about these endeavors in the "New Business" section of this issue.

Finally, we exhibited the RSDO at the 19th National Space Symposium in Colorado Springs, Colorado, April 7-11 2003. The conference was a great opportunity for us to highlight RSDO's capabilities and services.

Please peruse this issue of the newsletter, and feel free to contact me with any comments or questions regarding the RSDO.

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Staffing Updates

Meet Rebecca Wilkinson, New Contracting Officer For The RSDO

Rebecca joined RSDO in October 2002, as a Contracting Officer. She holds a B.A. in Romance Languages from the University of Maryland. Rebecca began working with NASA in 2001, and is still fairly new to the Goddard community. Prior to working in the RSDO, she worked in the Office for Institutional Programs (Code 210) at Goddard. Previously, Rebecca worked as a contract specialist for the Defense Contract Management Command (posted at the State Department), and the Defense Energy Supply Center. She is “matrixed” into the RSDO from Goddard’s Office for Mission Enabling Programs (Code 210.M). Welcome, Rebecca!

Introducing Bill Reaves, the Newest Member of the RSDO Team

Bill joined RSDO in January 2002, as a Mission Integration Manager. He holds a B.S. in Electrical Engineering from the Drexel University. Bill began work at Goddard in 1979 as a high school “pre-coop,” and then later as a college co-op. In his first position, he worked as an assistant electronics technician for the Instrument Electronics Branch, building and testing electronic breadboard circuits for the Cosmic Background Explorer (COBE). After graduation, Bill converted to a full time electrical engineer detailed to the Advanced Development and Flight Experiments Section of the Thermal Engineering Branch. Over the next 15 years Bill worked on a number of different projects, including positions as:

- Experiment Manager for the In-Flight Contamination Experiment (IFCE), an international contamination research partnership between the European Space Agency and NASA
- Experiment Manager for the Environmental Verification Experiment for the Explore Platform (EVEEP) that flew on the Extreme Ultraviolet Explorer (EUVE)
- Experiment Manager for the Contamination Environmental Package (CEP) for Hubble Space Telescope (HST) Servicing Missions, SM2 and SM3A
- Integration and Test Manager’s Support Details for the Geoscience Laser Altimeter System (GLAS), and Gamma-ray Large Area Space Telescope (GLAST) Anti- Coincidence Detector (ACD)

Bill has successfully managed several subsystem design and development efforts for Shuttle attached payloads and spacecraft, and has over 15 years of systems engineering and technical management expertise. In addition, Bill has served in an expert advisory capacity to various GSFC organizations, NASA centers, International Space Agencies, NASA contractors, and academic institutions in the area of flight and ground based contamination monitoring hardware. Bill has also been awarded multiple GSFC Director’s Discretionary Fund (DDF) grants to research and develop contamination monitoring technology. Welcome to RSDO, Bill!

Contracting Officer's Corner

RSDO Evaluating On-Ramp VII Proposals

RSDO's On-Ramp VII is underway! On-ramps offer existing RSDO vendors the opportunity to place new buses in the RSDO catalog, and new vendors may submit proposals to be included in the catalog. At the present time, eight vendors offer a total of 21 buses in the RSDO catalog. (To view the RSDO catalog online, visit http://rsdo.gsfc.nasa.gov/Rapidii/catalog2.cfm). The RSDO team received On-Ramp VII proposals on March 14, 2003, and is currently evaluating those proposals. We anticipate that the On-Ramp VII awards will be made in early June.

Small Disadvantaged Business Information

We encourage all our vendors to consider the use of small or disadvantaged businesses when enacting subcontracting agreements. For more information on official policies and goals concerning the integration of these companies into the NASA business environment, please visit the web site of NASA's Office of Small and Disadvantaged Business Utilization (OSDBU) at http://www.hq.nasa.gov/office/codek/.

New Business

GEC Study Awards Made!

In early April 2003, RSDO awarded several contracts for a second study concerning the Geospace Electrodynamic Connections (GEC) mission. A Space Science Enterprise project, GEC is managed by NASA's Solar Terrestrial Probes (STP) program at GSFC, and will enable scientists to study complex multi scale coupling between Earth's magnetosphere and Ionosphere-Thermosphere (I-T) regions. GEC will consist of multiple identical spacecraft, carrying duplicate sets of nine instruments. The spacecraft are scheduled to launch on a single Delta II 2920 in September 2009, and will be variably spaced in an elliptical parking orbit.

For the first GEC study, completed in June 2002, contractors created a conceptual design for the GEC spacecraft, including schedule and cost information. NASA personnel used the information gained from that initial study to refine the overall mission goals and objectives, and plan the cost and schedule of the project.

This second GEC Mission Study shall develop cost effective mission designs to support GEC mission planning at NASA. Study contractors will be developing cost effective GEC mission designs with supporting studies for each of the two GEC mission options:

1) Mission A: a constellation of three GEC spacecraft with selective redundancy, conducting science dipping campaigns to approximately 130 km

2) Mission B: a constellation of four GEC spacecraft with selective redundancy, and no science dipping campaigns

NASA awarded delivery orders for the second GEC Mission Study to three contractors: Astrium GmbH, Spectrum Astro, and Orbital Sciences Corporation. The performance period for this study is expected to be five months.

More information on GEC will be available in the next issue of the RSDO newsletter, and general information regarding the GEC mission is available online at http://stp.gsfc.nasa.gov/missions/gec/gec.htm.

GIFTS Looks for a Ride

NASA's Geosynchronous Imaging Fourier Transform Spectrometer (GIFTS) instrument for the New Millennium Program (NMP) Earth Observing-3 (EO-3) mission demonstrates revolutionary science and enabling technologies with a Geosynchronous Earth Orbit (GEO) technology demonstration program. The mission combines new and emerging sensor and data processing technologies to make geophysical measurements that will contribute to the Earth Science Enterprise (ESE) goals, as well as lead to revolutionary improvements in meteorological observations and forecasting.

The potential user community for the GIFTS instrument is large and diverse. GIFTS offers NASA the opportunity to space-qualify a significant number of new

technologies—both payload and non-payload specific—for future generation remote sensors. The technologies are applicable to any remote sensing mission needing reduction in mass, power, volume, and data rates.

The GIFTS instrument lost its planned 2006 launch slot late last year due to Navy budget problems. NASA is investigating several options to manifest GIFTS on a geosynchronous spacecraft, and one of these options is to fly GIFTS as a secondary payload on a future commercial geostationary satellite. The GIFTS project plans to issue a Request For Information (RFI), under the auspices of NASA's Rapid Spacecraft Development Office (RSDO) Geo Quick Ride Program, to collect information on the technical and programmatic issues and commercial interest regarding this option.

If the results of the RFI are favorable, NASA may issue a Request For Offer (RFO) to fund a vendor to accommodate the GIFTS instrument on its spacecraft. In addition, NASA has other science and technology payloads like GIFTS that could benefit from a piggyback ride on a commercial spacecraft. NASA will maintain the results of the RFI and potentially issue future RFOs to accommodate other secondary payloads. All appropriate vendors (i.e., experienced geosynchronous spacecraft owners and manufactures) are encouraged to participate in this upcoming RFI initiative and potential follow-on RFO.

The GIFTS instrument consists of a Control Module (CM) and a Sensor Module (SM). The mass and power for the CM are approximately 40kg and 150W and the mass and power for the SM are approximately 165kg and 350W. The GIFTS instrument is expected to be launch-ready in the early 2006 time frame. Additional information on the instrument and its schedule will be available in the upcoming RFI.

For additional information on the GIFTS mission, please refer to the GIFTS web site at http://oea.larc.nasa.gov/PAIS/GIFTS.html or at http://nmp.jpl.nasa.gov/eo3/index.html. For additional information on NASA's RSDO refer to their web site at http://rsdo.gsfc.nasa.gov/.

Other RSDO News

RSDO Attends National Symposium

Members of the RSDO team exhibited the RSDO at the 19th National Space Symposium held at the Broadmoor Hotel and Conference Center in Colorado Springs, Colorado, during the week of April 7, 2003. This annual symposium strives to integrate all sectors of the space community, including commercial, civil, and national security elements. During the conference, we discussed the RSDO's processes and capabilities with representatives from numerous U.S. Government agencies and aerospace industry companies. Additionally, we conducted some outreach operations with primary, secondary, and collegiate level students and educators. All in all, the symposium was an excellent aerospace event.